



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/736,688	12/12/2000	David Michael Kurn	20206-035 (P00-3417)	7936

7590 01/02/2004

Hewlett-Packard Company  
Intellectual Property Administration  
P.O. Box 272400  
Fort Collins, CO 80527-2400

EXAMINER

JACK, TODD M

ART UNIT	PAPER NUMBER
----------	--------------

2133

DATE MAILED: 01/02/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/736,688

Applicant(s)

KURN ET AL.

Examiner

Todd M Jack

Art Unit

2132

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 12 December 2000.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-8 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-8 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. §§ 119 and 120

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.  
a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

**DETAILED ACTION**

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ford (5,481,613) in view of Liao (6,606,663).

Claim 1: Ford teaches a key release agent is a server system in a computer network which is trusted to deliver decryption keys to decrypting systems only when the identity and attributes of the decrypting system match a set of access control criteria determined by the encrypting system at the time of encrypting (col. 6, lines 10-18), the form of the access controlled decryption block is such that only a recognized key release agent can calculate the decryption key and no other entity can modify the access control attributes in a way which the key release agent would not detect (col. 6, lines 28-32), and key release agent is a server system (col. 6, lines 10-18). Ford fails to teach a central server, a remote server, a database on the central server, enterprise credentials stored in the database, one application on the remote server, and the agent authenticates authorizations of specific applications to access resources based upon authorizations held. Liao teaches web service devices (col. 6, lines 41-42) acting as a central server, proxy server which refers to a piece of hardware equipment that

Art Unit: 2132

comprises one or more microprocessors, memory, buses, and interface (col. 6, lines 43-45) acting as a remote server, cache of a wireless client's credentials when a credential is sent to the wireless user agent to a protected Internet server—the proxy server retrieves the credential from the cache (col. 7, lines 55-67 and col. 8, lines 1-5), credential is cached in memory (col. 7, lines 61-63), if the wireless client device wishes to communicate with web server within protected realm, the wireless device must provide a credential (col. 8, lines 42-44), and a number of services available on the global Internet require that a user authenticate itself before access to a protected service (col. 7, lines 41-47). It would have been obvious to a person having ordinary skill in the art at the time the invention was made to modify Ford's system by including the servers, database, one application on the server, and where the agent authenticates. The modifications would have been obvious because a person having ordinary skill in the art would have been motivated to do so in order to control access to the cryptographic/computer system, store sensitive data obtained on the server for later use, and allow the server to access authorized resources.

Claim 2: Ford teaches a data structure, which is generated by the encrypting system, contains a statement of the access control criteria relating to the encryption plus key related data which will enable a key release agent to calculate the decryption key (col. 6, lines 24-28).

Art Unit: 2132

Claim 4: Ford teaches a key release agent is a server system in a computer network which is trusted to deliver decryption keys to decrypting systems only when the identity and attributes of the decrypting system match a set of access control criteria determined by the encrypting system at the time of encrypting (col. 6, lines 10-18).

Claim 5: Ford teaches a key-release private key (col. 6, lines 4-20) which acts as a decryptor, thus protecting the sensitive information.

Claim 6: Ford teaches a key-release private key (col. 6, lines 4-20) which acts as a decryptor, thus allowing access to only authorized individuals to provide privacy protection.

Claim 7: Ford teaches a key-release private key which acts as a decryptor, which is delivered to decryption keys to decrypting systems only when the identity and attributes of the decrypting system match a set of access criteria (col. 6, lines 4-20), a key release agent is a server system in a computer network which is trusted to deliver decryption keys to decrypting systems only when the identity and attributes of the decrypting system match a set of access control criteria determined by the encrypting system at the time of encrypting (col. 6, lines 10-18), a data structure which is generated by the encrypting system, contains a statement of the access control criteria relating to the encryption plus key related data which will enable a key release agent to calculate the decryption key (col. 6, lines 24-28). Ford fails to teach storing enterprise credentials in

Art Unit: 2132

a database on a central server and authenticating by the agent. A number of services available on the global Internet require that a user authenticate itself before access to a protected service (col. 7, lines 41-47). It would have been obvious to a person having ordinary skill in the art at the time the invention was made to modify Ford's system by including the storing of credentials in a database and authenticating authorizations of specific applications on the remote server. The modifications would have been obvious because a person having ordinary skill in the art would have been motivated to do so in order that sensitive credentials are protected from unauthorized access.

Claims 3 and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ford in view Liao, further in view of Geer (6,192,131 B1).

Claim 3: Ford fails to teach the level of trust is defined as the number of individuals required for reconstructing the master key and/or for performing a sensitive operation. Geer teaches if a portion of the log is found to be super-encrypted, the parties who hold the additional keys could be persuaded to open their sub-conversations using those keys (col. 11, lines 33-38). It would have been obvious to a person having ordinary skill in the art at the time the invention was made to modify Ford's system by including the needed trust of a number of individuals required for reconstructing a key. The modifications would have been obvious because a person having ordinary skill in the art would have been motivated to do so in order to ensure the sensitive information stored was accessed by an unauthorized individual.

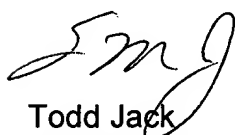
Claim 8: Ford teaches a key release agent is a server system in a computer network which is trusted to deliver decryption keys to decrypting systems only when the identity and attributes of the decrypting system match a set of access control criteria determined by the encrypting system at the time of encrypting (col. 6, lines 10-18). Ford fails to teach providing a computer system having at least one server and a cryptographically protected database, instantiating an application process on the computer system, and providing to the application process, by the key repository process, an encrypted file of the sensitive information, the encrypted file being provided via the remote agent interface or the trusted link if the application process and the key repository process are located on different servers. Liao teaches the proxy server intercepts and caches a wireless client's credentials when a credential is first sent from the wireless user agent to a protected Internet server (col. 7, lines 55-67 and col. 8, lines 1-5) and the personal computer system can execute a HTML Web browser such as Netscape Navigator in order to communicate via the internet (col. 4, lines 21-32). Greer teaches a computer that uses a key to encrypt messages transmitted during a conversation among the conversation computers and to store the encrypted messages in a message log (col. 1, lines 34-46). It would have been obvious to a person having ordinary skill in the art at the time the invention was made to modify Ford's system by providing a server and a cryptographically protected database, an application process, and an encrypted file of sensitive information. The modifications would have been obvious because a person having ordinary skill in the art would have been motivated to do so in order to ensure the cryptographic credentials were stored and made available to others.

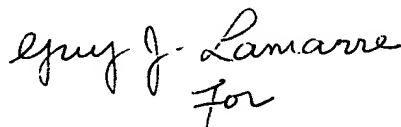
**Conclusion**

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Todd M Jack whose telephone number is 703-305-1027. The examiner can normally be reached on M-Th, alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Albert Decady, can be reached on 703-305-9595. The fax phone number for the organization where this application or proceeding is assigned is 703-746-7239.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 305-3900.

  
Todd Jack  
December 18, 2003

  
for  
Albert DeCady  
Primary Examiner